Practitioner's Docket No. PERLIN-10

PATENT

19/849809

Preliminary Classification:

Proposed Class:

Subclass:

Subcias:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129.'" M.P.E.P. § 601, 7th ed.

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application Assistant Commissioner for Patents Washington, D.C. 20231

#### **NEW APPLICATION TRANSMITTAL**

Transmitted herewith for filing is the patent application of

Inventor(s): Mark W. Perlin

WARNING: 37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name of the inventorship are the set.

is filed supplying or changing the name or names of the inventor or inventors."

For (title): METHOD AND SYSTEM FOR NUCLEIC ACID SEQUENCING

## CERTIFICATION UNDER 37 C.F.R. § 1.10\*

(Express Mail label number is mandatory.) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date  $\underline{\text{May 4; 2001}}$ , in an envelope as "Express Mail Post Office to Addressee," mailing Label Number  $\underline{\text{EL707030641US}}$ , addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

Tracey L. Milka

(type or print name of person mailing paper)

Signature of person mailing paper

**WARNING:** Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

\*WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will **not** be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

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### 1. Type of Application

This	DEW	application	is	for	aln	١

(check one applicable item below)

	X	Original (nonprovisional)
		Design
		☐ Plant
WAR	NING	Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.
WAR.	NING	: Do not use this transmittal for the filing of a provisional application.
NOTE	TF	one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION RANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.
		Divisional.
		Continuation.
		Continuation-in-part (C-I-P).

### 2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
  - (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

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WARNING	G: When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).
	The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.
3. Pape	rs Enclosed
	quired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 esign) Application
_	Pages of specification
3 P	Pages of claims
<u>6</u> s	sheets of drawing
WARNING	G: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).
ir. tt o.	Identifying indicia, if provided, should include the application number or the title of the invention, nventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed in the back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page " 37 C.F.R. § 1.84(c)).
	(complete the following, if applicable)
	The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).
	formal
X	informal
B. Oth	er Papers Enclosed
	ages of declaration and power of attorney
_	ages of abstract
<u> </u>	ther
4. Additi	ional papers enclosed
	Amendment to claims
_	☐ Cancel in this applications claims before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)
	☐ Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)
	Preliminary Amendment
	Information Disclosure Statement (37 C.F.R. § 1.98)
	Form PTO-1449 (PTO/SB/08A and 08B)
	Citations

	Decl	aration of Biological Deposit
	perta amir	nission of "Sequence Listing," computer readable copy and/or amendment aining thereto for biotechnology invention containing nucleotide and/or acid sequence.
	Auth tive	orization of Attorney(s) to Accept and Follow Instructions from Representa-
	Spe	cial Comments
	] Othe	भ
		n or oath (including power of attorney)
	the prior by all or applicate the sign by a sta being fi declarate person execute	executed declaration is not required in a continuation or divisional application provided that it nonprovisional application contained a declaration as required, the application being filed is rewer than all the inventors named in the prior application, there is no new matter in the fon being filed, and a copy of the executed declaration filed in the prior application (showing lature or an indication thereon that it was signed) is submitted. The copy must be accompanied tement requesting deletion of the names of person(s) who are not inventors of the application led. If the declaration in the prior application was filed under § 1.47, then a copy of that ion must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)–(3).
NOTE:	is direct abbrevia country C.F.R. §	ration filed to complete an application must be executed, identify the specification to which it ed, identify each inventor by full name including family name and at least one given name, without ation together with any other given name or initial, and the residence, post office address and or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 § 1.63(a)(1)–(4).
NOTE:	as preso as preso is that in this par	rentorship of a nonprovisional application is that inventorship set forth in the oath or declaration cribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration cribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship oventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under agraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name as of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).
5	Enc	losed
	Exe	cuted by
		(check all applicable boxes)
	X	inventor(s).
		legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.
		joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
		☐ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F.R. § 1.47 is also attached. See item 13 below for fee.
_		Enclosed.
NOTE:	the U.S	the filing is a completion in the U.S. of an International Application or where the completion of 6. application contains subject matter in addition to the International Application, the application 6 treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE EW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.
		Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s).
		(New Application Transmittal I4-11—page 4 of 11)

(The declaration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
Showing that the filing is authorized.  (not required unless called into question. 37 C.F.R. § 1.41(d))
6. Inventorship Statement
<b>WARNING:</b> If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.
The inventorship for all the claims in this application are:
☐ The same.
or
Not the same. An explanation, including the ownership of the various claims a the time the last claimed invention was made,
☐ is submitted.
☐ will be submitted.
7. Language
NOTE: An application including a signed oath or declaration may be filed in a language other than English An English translation of the non-English language application and the processing fee of \$130.0 required by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as made be set by the Office. 37 C.F.R. § 1.52(d).
☑ English
☐ Non-English
☐ The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).
8. Assignment
☐ An assignment of the invention to
□ is attached. A separate □ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or □ FORM PTO 1595 is also attached.
☐ will follow.
NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the applicatio and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).
WARNING: A newly executed "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.
(New Application Transmittal [4-1]—page 5 of 1

9.	Ce	rtifie	d	Cor	Эy
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Certified copy(ies) of application(s)

Country	Appln.	No.		Filed
Country	Appln.	. No.		Filed
Country	Appin.	. No.		Filed
from which priority is	s claimed			
☐ is (are) at				
☐ will follow				
NOTE: The foreign ap	plication forming the basis for th C.F.R. § 1.55(a) and 1.63.	e claim for	priority must b	e referred to in the oath or
U.S. application § 120 is itself e	r any foreign priority for which the n or International Application from entitled to priority from a prior for IEW APPLICATION TRANSMITTA	n which this eign applica	application cla tion, then comp	ims benefit under 35 U.S.C. olete item 18 on the ADDED
10. Fee Calculatio	n (37 C.F.R. § 1.16)			
A. X Regular a	application			
	CLAIMS AS	S FILED		
Number filed	Number E	xtra	Rate	Basic Fee 37 C.F.R. § 1.16(a) \$8900.00 710.
Total Claims (37 C.F.R. § 1.16(c))	16 - 20 = 0	×	\$ 18.00	0.00
Independent				
Claims (37 C.F.R. § 1.16(b))	3 - 3 = 0	×	\$ 78.00	0.00
Multiple dependent if any (37 C.F.R. §		+	\$260.00	
☐ Amendm	ent cancelling extra claims	s is enclo	sed.	
☐ Amendm	ent deleting multiple-depe	ndencies	is enclosed	l <b>.</b>
☐ Fee for e	extra claims is not being p	aid at thi	is time.	
prior to the ex	extra claims are not paid on filing the privation of the time period set for deficiency. 37 C.F.R. § 1.16(d).	hey must be or response	paid or the clair by the Patent	ms cancelled by amendment, and Trademark Office in any
	Filing Fee Calcu	ılation		\$ 710.00
	pplication —37 C.F.R. § 1.16(f))			
(\$0.00	Filing Fee Calcu	ilation		\$
	i imig i ee Oalou	1,46,011		

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C.		Plant application	D C 4 4/	2/~//		
		(\$480.00—37 C.F.	-			<b>c</b>
4.4	Commi	l Estitu Statemen	_	e calculation		\$
11.		I Entity Statemen	• •			
	X	Statement(s) that is (are) attached.	this is a fi	ling by a small o	entity under 37	C.F.R. § 1.9 and 1.27
WA	RNING	the status is available affect any other applicated indirectly dependent refiling of an applicated a continued prosecula new determination application. A nonpression of a prior application or in the reference to the statement in the prior affect.	e and desimolication or upon the application application as to continovisional application, or patent if the ternent in the rapplication to the small	ed. Status as a sma patent, including a oplication or patent 1.53 as a continua tion under § 1.53(d nued entitlement to oplication claiming b a reissue application e nonprovisional ap- the prior application or in the patent a til entity basic statut	all entity in one apparapplications or pata in which the status tion, division, or col i)), or the filing of a small entity status for enefit under 35 U. ion may rely on a supplication or the rei and status as a smoory filing fee will be	dication or patent in which dication or patent does not tents which are directly or thas been established. The ntinuation-in-part (including reissue application requires or the continuing or reissue S.C. § 119(e), 120, 121, or statement filed in the prior includes a or includes a copy of the all entity is still proper and treated as such a reference
WA	.RNING	•	nake the re			s signing the statement 509.03, 6th ed., rev. 2, July
		(00	mplete th	ne following, if	applicable)	
		Status as a small	entity wa	as claimed in p	rior application	
		/		, filed on		_, from which benefit
		is being claimed f	or this ap	oplication under	r:	
			119(e), 120, 121, 365(c),			
		and which status	s as a sn	nall entity is stil	I proper and de	esired.
		☐ A copy of th	e statem	ent in the prior	application is	included.
		Filing Fee Cal	culation (	50% of <b>A, B</b> or	C above)	
		•	\$	355.00		
NO	an		of the dat	e of timely paymer		lished and a refund request e two-month period is not
12.	Requ	est for Internatio	nal-Type	Search (37 C.	F.R. § 1.104(d)	)
			(com	olete, if applica	ble)	
		Please prepare an when national exa			•	application at the time

13. Fee Payment Being Made at This Time			
☐ Not Enclosed			
<ul> <li>No filing fee is to be paid at this time.</li> <li>(This and the surcharge required by 37 C.F.R. § subsequently.)</li> </ul>	1.16(e)	can be pa	₃id
	\$ _	355.00	_
☐ Recording assignment (\$40.00; 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".)	\$ .		
☐ Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))	\$ .		
For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$ .		
☐ Processing and retention fee (\$130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))	\$ .		
☐ Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$ .		
NOTE: 37 C.F.R. § 1.21(I) establishes a fee for processing and retaining any applifailing to complete the application pursuant to 37 C.F.R. § 1.53(f) and this 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the beneficither the basic filing fee must be paid, or the processing and retention fewithin 1 year from notification under § 53(f).	s, as well a it of a prior	s the change: U.S. applicat (I) must be p	s to tion, aid,
Total fees enclosed	\$	355.00	
14. Method of Payment of Fees			
☑ Check in the amount of \$ 355.00			
☐ Charge Account No	in the	amount	of
A duplicate of this transmittal is attached.			
NOTE: Fees should be itemized in such a manner that it is clear for which purpose § 1.22(b).	the fees ar	e paid. 37 C.	F.R.

## 15. Authorization to Charge Additional Fees

WARNING:	If no	fees	are	to	be	paid	on	filing,	the	following	items	should	not	be	completed.	
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**WARNING:** Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

- The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 19-0737:
  - 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
  - 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)
- NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.
  - ☐ 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
  - ☐ 37 C.F.R. § 1.17(a)(1)–(5) (extension fees pursuant to § 1.136(a)).
  - ☐ 37 C.F.R. § 1.17 (application processing fees)
- NOTE: ". . . A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).
  - 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))
- NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).
- NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . . " From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

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### 16. Instructions as to Overpayment

VOTE:	" Amounts of twenty-five dollars or less will not be returned unless specifically requested within
	a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may
	be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).

X	Credit	Account N	o 19-0737	

□ Refund

Reg. No. 30,587

Tel. No. (412) 621-9222

Customer No.

SIGNATURE OF PRACTITIONER

Ansel M. Schwartz

(type or print name of attorney)
One Sterling Plaza

201 N. Craig Street, Suite 304

P.O. Address

Pittsburgh, PA 15213

(New Application Transmittal [4-1]—page 10 of 11)

	Incom	poration by reference of added pages	
	pr sta th	heck the following item if the application in this transmittal claims the benefit of ior U.S. application(s) (including an international application entering the U.S. age as a continuation, divisional or C-I-P application) and complete and attach e ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF RIOR U.S. APPLICATION(S) CLAIMED)	
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed	
		Number of pages added	
		Plus Added Pages for Papers Referred to in Item 4 Above	
		Number of pages added	
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.	
		Number of pages added	
		Plus "Assignment Cover Letter Accompanying New Application"	
		Number of pages added	
Statement Where No Further Pages Added		ment Where No Further Pages Added	
		(if no further pages form a part of this Transmittal, then end this Transmittal wit this page and check the following item)	
	X	This transmittal ends with this page.	